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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,654	01/14/2005	Jonathon Reo Campian	5772-000001/US/NP	2174
27572 7590 12/28/2009 HARNES, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303				
EXAMINER				
OMCBA, ESSAMA				
ART UNIT		PAPER NUMBER		
3726				
MAIL DATE		DELIVERY MODE		
12/28/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,654

Applicant(s)

CAMPION, JONATHON REO

Examiner

Essama Omgba

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-9, 13, 18-22, 26, 35-38, 40-47, 51 and 52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 49-52 is/are allowed.
- 6) ☒ Claim(s) 6, 7, 13, 19, 20, 26, 36, 38, 40, 41, 46 and 47 is/are rejected.
- 7) ☒ Claim(s) 5, 8, 9, 18, 21, 22, 35, 37 and 42-45 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-848)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 8, 2009 has been entered.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 6, 7, 13, 36, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esterl (DE 100 16 391) in view of Baulier (US Patent 6,742,372) or Campian (US Patent 5,454,261).

With regards to claim 40, Esterl discloses a nest 30 for holding a first sheet metal 26, a robotic arm 2 operatively associated with the nest, a forming steel assembly including a tool steel 20 fixedly attached to an end of the robotic arm, the tool steel having a face 22 for crash forming a short flange 24 on the first sheet material. Although Esterl does not appear to disclose the tool steel having a wedge-shaped face conforming to the short flange, however it is known to provide such tool steels with a wedge-shaped face that conform to a short flange as attested by Baulier, see figures 3-

6 or Campian (nest 94 including a wedge-shaped face, figs. 8 and 9). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have modified the tool steel of Esterl to include a wedge-shaped face, in light of the teachings of Baulier of Campian, in order to minimize hemming defects such as transparency marks, rollback and outside rope.

Regarding claim 6, see extension 16 in the figures of Esterl.

Regarding claims 7 and 13, it is inherent that the robotic arm of Esterl rotatably supports the pressure forming steel assembly as is conventional in the art.

Regarding claim 36, see figure 2 of Esterl.

Regarding claim 41, elements 16 and 34 in the figures of Esterl could be considered a mechanical positioner.

4. Claims 19, 20, 26, 38, 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Esterl in view of Persson (US Patent 6,694,793) and Baulier or Campian.

With regards to claim 46, Esterl discloses an apparatus for forming and joining a first sheet material 26 to a second sheet material 28, the first sheet material having a periphery, the periphery having a contour (figs. 1 and 2), the apparatus comprising a nest 30 including a material-contacting portion for holding the first sheet material, a forming and joining assembly operatively associated with the nest, the assembly including a robotic arm 2 and a tool steel fixedly attached at an end of the robotic arm, the tool steel having a face 22 for crash forming a short flange 24 and bending the short flange onto the second sheet material between the tool steel and the material contacting

portion. Although Esterl does not specifically disclose a computer having a tool-driving program operatively associated with the forming and joining assembly for manipulating and guiding the tool steel along an approach path during crash forming, however such computer control means are known as attested by Persson, see column 3, lines 46-53. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have included a computer having a tool-driving program operatively associated with the forming and joining assembly for manipulating and guiding the tool steel along an approach path during crash forming in the forming and joining assembly of Esterl, in light of the teachings of Persson, in order to provide a precision advantage to the forming and joining assembly. Regarding the recitation of the tool steel having a wedge-shaped face conforming to the short flange, Applicant should note that it is known to provide such tool steels with a wedge-shaped face that conform to a short flange as attested by Baulier, see figures 3-6 or Campian (nest 94 including a wedge-shaped face, figs. 8 and 9). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have modified the tool steel of Esterl/Persson to include a wedge-shaped face, in light of the teachings of Baulier of Campian, in order to minimize hemming defects such as transparency marks, rollback and outside rope.

Regarding claim 19, see extension 16 in the figures of Esterl.

Regarding claims 20 and 26, it is inherent that the robotic arm of Esterl rotatably supports the pressure forming steel assembly as is conventional in the art.

Regarding claim 38, see figure 2 of Esterl.

Regarding claim 47, elements 16 and 34 in the figures of Esterl could be considered a mechanical positioner.

Allowable Subject Matter

5. Claims 49-52 are allowed.
6. Claims 5, 8, 9, 18, 21, 22, 35, 37 and 42-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed October 8, 2009 have been fully considered but they are not persuasive.

In response to Applicant's argument that Esterl does not disclose "a tool steel fixedly attached to an end of a robot arm" because tool steel 22 pivots relative to the robot arm, the examiner submits that even though the tool steel of Esterl might pivot relative to the robot arm, it is still considered fixedly attached to the robot arm. As defined in the Merriam-Webster online dictionary, one of the generally accepted meaning of "fixed" is securely placed or fastened. Therefore it is reasonable to construe the tool steel of Esterl as being fixedly attached to the robot arm.

In response to Applicant's argument that the crease pliers of Esterl are not "for crash forming the short flange", rather they are used to nibble or break form a flange having a standard length along an extended length of the body panel, the examiner

submits that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Essama Omgba/
Primary Examiner, Art Unit 3726

eo
December 21, 2009